

PRELIMINARY DETERMINATION  
ON PERMIT APPLICATION

Date of Mailing: August 22, 2018

Name of Applicant: A.M. Welles, Inc.

Source: Portable Crushing/Screening Operation

Proposed Action: The Department of Environmental Quality (Department) proposes to issue a permit, with conditions, to the above-named applicant. The application was assigned Montana Air Quality Permit Application Number 5210-00.

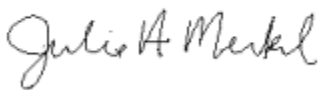
Proposed Conditions: See attached.

Public Comment: Any member of the public desiring to comment must submit such comments in writing to the Air Quality Bureau (Bureau) of the Department at the address in the footer of this cover letter. Comments may address the Department's analysis and determination, or the information submitted in the application. In order to be considered, comments on this Preliminary Determination are due by September 21, 2018. Copies of the application and the Department's analysis may be inspected at the Bureau's office in Helena. For more information, you may contact the Department.

Departmental Action: The Department intends to make a decision on the application after expiration of the Public Comment period described above. A copy of the decision may be obtained at the Bureau's office in Helena. The permit shall become final on the date stated in the Department's Decision on this permit, unless an appeal is filed with the Board of Environmental Review (Board).

Procedures for Appeal: Any person jointly or severally adversely affected by the final action may request a hearing before the Board. Any appeal must be filed by the date stated in the Department's Decision on this permit. The request for a hearing shall contain an affidavit setting forth the grounds for the request. Any hearing will be held under the provisions of the Montana Administrative Procedures Act. Submit requests for a hearing in triplicate to: Chairman, Board of Environmental Review, P.O. Box 200901, Helena, MT 59620.

For the Department,



Julie A. Merkel  
Permitting Services Section Supervisor  
Air Quality Bureau  
(406) 444-3626



John P. Proulx  
Air Quality Specialist  
Air Quality Bureau  
(406) 444-5391

JM:JP  
Enclosure

## MONTANA AIR QUALITY PERMIT

Issued To: A.M. Welles, Inc.  
P.O. Box 2808  
Norris, MT 59745

MAQP: #5210-00  
Application Complete: 7/7/2018  
Preliminary Determination Issued: 8/22/2018  
Department Decision Issued:  
Permit Final:

A Montana Air Quality Permit (MAQP), with conditions, is hereby granted to A.M. Welles, Inc. (A.M. Welles) pursuant to Sections 75-2-204 and 211 of the Montana Code Annotated (MCA), as amended, and Administrative Rules of Montana (ARM) 17.8.701, *et seq.*, as amended, for the following:

### SECTION I: Permitted Facilities

#### A. Permitted Equipment

- 1 – 400 ton per hour (tph) primary jaw crusher
- 2 – 200 tph secondary cone crushers
- 5 – 300 tph 3-deck screens
- 1 – 2500 horsepower (hp) diesel-fired generator
- Associated equipment

#### B. Plant Location

A.M. Welles operates a portable crushing/screening facility, which will initially be located at ***Section 15, Township 2 North, Range 4 East (45.6616, -111.2182)***, in Gallatin County, Montana. However, MAQP 5210-00 applies while operating at any location in Montana, except those areas having a Department of Environmental Quality (Department)-approved permitting program, areas considered tribal lands, or areas in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM<sub>10</sub>) nonattainment areas. *A Missoula County air quality permit will be required for locations within Missoula County, Montana.* An addendum will be required for locations in or within 10 km of certain PM<sub>10</sub> nonattainment areas.

### SECTION II: Conditions and Limitations

#### A. Emission Limitations

1. All visible emissions from any Standards of Performance for New Stationary Source (NSPS) – affected crusher shall not exhibit an opacity in excess of the following averaged over 6 consecutive minutes (ARM 17.8.340 and 40 CFR 60, Subpart OOO):
  - For crushers that commence construction, modification, or reconstruction on or after April 22, 2008: 12% opacity

- For crushers that commence construction, modification, or reconstruction after August 31, 1983 but before April 22, 2008: 15% opacity
2. All visible emissions from any other NSPS-affected equipment (such as screens and conveyors) shall not exhibit an opacity in excess of the following averaged over six consecutive minutes (ARM 17.8.340 and 40 CFR 60, Subpart OOO):
    - For equipment that commence construction, modification, or reconstruction on or after April 22, 2008: 7% opacity
    - For equipment that commence construction, modification, or reconstruction after August 31, 1983 but before April 22, 2008: 10% opacity
  3. All visible emissions from any non-NSPS affected equipment shall not exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304).
  4. Water and spray bars shall be available on-site at all times and operated as necessary to maintain compliance with the opacity limitations in Sections II.A.1, II.A.2, and II.A.3 (ARM 17.8.749).
  5. A.M. Welles shall not cause or authorize the use of any street, road or parking lot without taking reasonable precautions to control emissions of airborne particulate matter (ARM 17.8.308).
  6. A.M. Welles shall treat all unpaved portions of the haul roads, access roads, parking lots, or the general plant area with water and/or chemical dust suppressant, as necessary, to maintain compliance with the reasonable precautions limitation in Section II.A.5 (ARM 17.8.749).
  7. A.M. Welles shall not operate more than 3 crushers at any given time and the total combined maximum rated design capacity of the crushers shall not exceed 800 tons per hour (TPH) (ARM 17.8.749).
  8. A.M. Welles shall not operate more than 5 screens at any given time and the total combined maximum rated design capacity of the screens shall not exceed 1500 TPH (ARM 17.8.749).
  9. A.M. Welles shall not operate or have on-site more than 1 diesel engine/generator. The maximum combined capacity of the engine that drives the generator shall not exceed 2500 hp (ARM 17.8.749).
  10. Operation of the diesel engine driving the generator shall not exceed 2500 hours during any rolling 12-month time period (ARM 17.8.749 and ARM 17.8.1204).

11. If the permitted equipment is used in conjunction with any other equipment owned or operated by A.M. Welles, at the same site, production shall be limited to correspond with an emission level that does not exceed 250 tons during any rolling 12-month period. Any calculations used to establish production levels shall be approved by the Department (ARM 17.8.749).
12. A.M. Welles shall comply with all applicable standards and limitations, monitoring, reporting, recordkeeping, testing, and notification requirements contained in 40 CFR 60, Subpart OOO, *Standards of Performance for Nonmetallic Mineral Processing Plants* (ARM 17.8.340 and 40 CFR 60, Subpart OOO).
13. A.M. Welles shall comply with all applicable standards and limitations, and the reporting, recordkeeping, and notification requirements contained in 40 CFR 60, Subpart IIII, *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines* and 40 CFR 63, Subpart ZZZZ, *National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*, for any applicable diesel engine (ARM 17.8.340; 40 CFR 60, Subpart IIII; ARM 17.8.342 and 40 CFR 63, Subpart ZZZZ).

B. Testing Requirements

1. Within 60 days after achieving maximum production, but no later than 180 days after initial start-up, an Environmental Protection Agency (EPA) Method 9 opacity test and/or other methods and procedures as specified in 40 CFR 60.675 must be performed on all NSPS-affected equipment to demonstrate compliance with the emission limitations contained in Section II.A.1 and II.A.2. Additional testing may be required by 40 CFR 60, Subpart OOO (ARM 17.8.340 and 40 CFR 60, Subpart OOO).
2. All compliance source tests shall conform to the requirements of the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
3. The Department may require further testing (ARM 17.8.105).

C. Operational Reporting Requirements

1. If this crushing/screening plant is moved to another location, an Intent to Transfer form must be sent to the Department and a Public Notice Form for Change of Location must be published in a newspaper of general circulation in the area to which the transfer is to be made, at least 15 days prior to the move. The proof of publication (affidavit) of the Public Notice Form for Change of Location must be submitted to the Department prior to the move. These forms are available from the Department (ARM 17.8.749 and ARM 17.8.765).
2. A.M. Welles shall supply the Department with annual production information for all emission points, as required by the Department in the annual emission inventory request. The request will include, but not be limited to, all sources of emissions identified in the emission inventory contained in the permit analysis.

Production information shall be gathered on a calendar-year basis and submitted to the Department by the date required in the emission inventory request. Information shall be in the units required by the Department. This information may be used for calculating operating fees, and/or to verify compliance with permit limitations (ARM 17.8.505).

3. A.M. Welles shall notify the Department of any construction or improvement project conducted, pursuant to ARM 17.8.745, that would include ***the addition of a new emissions unit***, change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location, or fuel specifications, or would result in an increase in source capacity above its permitted operation.

The notice must be submitted to the Department, in writing, 10 days prior to startup or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(l)(d) (ARM 17.8.745).

4. A.M. Welles shall maintain records showing daily hours of operation and daily production rates for the last 12 months. The records compiled in accordance with this permit shall be maintained by A.M. Welles as a permanent business record for at least 5 years following the date of the measurement, must be available at the plant site for inspection by the Department, and must be submitted to the Department upon request. These records may be stored at a location other than the plant site upon approval by the Department (ARM 17.8.749).
5. A.M. Welles shall document, by month, the hours of operation of the diesel engine/generator. By the 25<sup>th</sup> day of each month, A.M. Welles shall total the hours of operation for the diesel engine/generator for the previous month. The monthly information will be used to demonstrate compliance with the rolling 12-month limitation in Section II.A.11. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).
6. A.M. Welles shall annually certify that its emissions are less than those that would require the source to obtain an air quality operating permit as required by ARM 17.8.1204(3)(b). The annual certification shall comply with the certification requirements of ARM 17.8.1207. The annual certification shall be submitted along with the annual emissions inventory information (ARM 17.8.749 and ARM 17.8.1204).

#### D. Notification

A.M. Welles shall provide the Department with written notification of the actual start-up date of the A.M. Welles facility postmarked within 15 days after the actual start-up date (ARM 17.8.749)

### SECTION III: General Conditions

- A. Inspection – A.M. Welles shall allow the Department's representatives access to the source at all reasonable times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment such as Continuous Emission Monitoring Systems (CEMS) or Continuous Emissions Rate Monitoring System (CERMS), or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.
- B. Waiver – The permit and all the terms, conditions, and matters stated herein shall be deemed accepted if A.M. Welles fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving A.M. Welles of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided for in ARM 17.8.740, *et seq.* (ARM 17.8.756)
- D. Enforcement – Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties or other enforcement action as specified in Section 75-2-401, *et seq.*, MCA.
- E. Appeals – Any person or persons jointly or severally adversely affected by the Department's decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefor, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The filing of a request for a hearing does not stay the Department's decision, unless the Board issues a stay upon receipt of a petition and a finding that a stay is appropriate under Section 75-2-211(11)(b), MCA. The issuance of a stay on a permit by the Board postpones the effective date of the Department's decision until conclusion of the hearing and issuance of a final decision by the Board. If a stay is not issued by the Board, the Department's decision on the application is final 16 days after the Department's decision is made.
- F. Permit Inspection – As required by ARM 17.8.755, Inspection of Permit, a copy of the air quality permit shall be made available for inspection by the Department at the location of the permitted source.
- G. Air Quality Operation Fees – Pursuant to Section 75-2-220, MCA, failure to pay the annual operation fee by A.M. Welles may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.
- H. Duration of Permit – Construction or installation must begin or contractual obligations entered into that would constitute substantial loss within 3 years of permit issuance and proceed with due diligence until the project is complete or the permit shall expire (ARM 17.8.762).
- I. The Department may modify the conditions of this permit based on local conditions of any future site. These factors may include, but are not limited to, local terrain, meteorological conditions, proximity to residences, etc.

- J. A.M. Welles shall comply with the conditions contained in this permit while operating in any location in Montana, except within those areas that have a Department-approved permitting program or areas considered tribal lands.

Montana Air Quality Permit (MAQP) Analysis  
A.M. Welles, Inc.  
MAQP #5210-00

I. Introduction/Process Description

A.M. Welles, Inc. (A.M. Welles) proposes to install and operate a portable crushing/screening facility.

A. Permitted Equipment

- 1 – 400 ton per hour (tph) primary jaw crusher
- 2 – 200 tph secondary cone crushers
- 5 – 300 tph 3-deck screens
- 1 – 2,500 horsepower (hp) diesel-fired generator
- Associated equipment

B. Source Description

For a typical operational set-up, aggregate materials are fed into the wash plant where they are washed and separated through a three-deck screen before being conveyed by size into on-site stock piles. Electrical power is provided by a diesel generator. The facility will initially be located at Section 15, Township 2 North, Range 4 East (45.6616, -111.2182), in Gallatin County, Montana.

II. Applicable Rules and Regulations

The following are partial explanations of some applicable rules and regulations that apply to the facility. The complete rules are stated in the Administrative Rules of Montana (ARM) and are available, upon request, from the Department of Environmental Quality (Department). Upon request, the Department will provide references for locations of complete copies of all applicable rules and regulations where appropriate.

A. ARM 17.8, Subchapter 1 – General Provisions, including, but not limited to:

1. ARM 17.8.101 Definitions. This rule includes a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
2. ARM 17.8.105 Testing Requirements. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct tests, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.
3. ARM 17.8.106 Source Testing Protocol. The requirements of this rule apply to any emission source testing conducted by the Department, any source, or other entity as required by any rule in this chapter, or any permit or order issued pursuant to this chapter, or the provisions of the Clean Air Act of Montana, 75-2-101, *et seq.*, Montana Code Annotated (MCA).



A.M. Welles shall comply with the requirements contained in the Montana Source Test Protocol and Procedures Manual, including, but not limited to, using the proper test methods and supplying the required reports. A copy of the Montana Source Test Protocol and Procedures Manual is available from the Department upon request.

4. ARM 17.8.110 Malfunctions. (2) The Department must be notified promptly by telephone whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation or to continue for a period greater than 4 hours.
5. ARM 17.8.111 Circumvention. (1) No person shall cause or permit the installation or use of any device or any means that, without resulting in reduction of the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant that would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner as to create a public nuisance.

B. ARM 17.8, Subchapter 2 – Ambient Air Quality, including, but not limited to:

1. ARM 17.8.204 Ambient Air Monitoring
2. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
3. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
4. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
5. ARM 17.8.213 Ambient Air Quality Standard for Ozone
6. ARM 17.8.214 Ambient Air Quality Standard for Hydrogen Sulfide
7. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
8. ARM 17.8.221 Ambient Air Quality Standard for Visibility
9. ARM 17.8.222 Ambient Air Quality Standard for Lead
10. ARM 17.8.223 Ambient Air Quality Standard for PM<sub>10</sub>
11. ARM 17.8.230 Fluoride in Forage

A.M. Welles must maintain compliance with the applicable ambient air quality standards.

C. ARM 17.8, Subchapter 3 – Emission Standards, including, but not limited to:

1. ARM 17.8.304 Visible Air Contaminants. This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.
2. ARM 17.8.308 Particulate Matter, Airborne. (1) This rule requires an opacity limitation of less than 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne particulate matter. (2) Under this rule, A.M. Welles shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter.

3. ARM 17.8.309 Particulate Matter, Fuel Burning Equipment. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this section
4. ARM 17.8.310 Particulate Matter, Industrial Processes. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter in excess of the amount set forth in this section.
5. ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel. This rule requires that no person shall burn liquid, solid, or gaseous fuel in excess of the amount set forth in this section.
6. ARM 17.8.340 Standard of Performance for New Stationary Sources and Emission Guidelines for Existing Sources. This rule incorporates, by reference, 40 CFR Part 60, Standards of Performance for New Stationary Sources (NSPS). A.M. Welles is considered an NSPS affected facility under 40 CFR Part 60 and is subject to the requirements of the following subparts.
  - a. 40 CFR 60, Subpart A – General Provisions apply to all equipment or facilities subject to an NSPS Subpart as listed below:
  - b. 40 CFR 60, Subpart OOO – Standards of Performance for Nonmetallic Mineral Processing Plants. In order for a crushing plant to be subject to this subpart, the facility must meet the definition of an affected facility and, the affected equipment must have been constructed, reconstructed, or modified after August 31, 1983. Based on the information submitted by A.M. Welles, the portable crushing equipment to be used under MAQP #5210-00 is subject to this subpart because they have a capacity to crush more than 150 tph of crushing capacity.
  - c. 40 CFR 60, Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (CI ICE). Owners and operators of stationary CI ICE that commence construction after July 11, 2005, where the stationary CI ICE are manufactured after April 1, 2006, and are not fire pump engines, and owners and operators of stationary CI ICE that modify or reconstruct their stationary CI ICE after July 11, 2005, are subject to this subpart. Based on the information submitted by A.M. Welles, the CI ICE equipment to be used under MAQP #5210-00 may be subject to this subpart if the CI ICE remains stationary for 12 consecutive months or longer.
7. ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source Categories. This rule incorporates, by reference, 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Source Categories. A. M. Welles is possibly considered a NESHAP-affected facility under 40 CFR Part 63 and is subject to the requirements of the following subparts.
  - a. 40 CFR 63, Subpart A – General Provisions apply to all equipment or facilities subject to a NESHAPs Subpart as listed below.

- b. 40 CFR 63, Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants (HAPs) for Stationary Reciprocating Internal Combustion Engines (RICE). An owner or operator of a stationary reciprocating internal combustion engine (RICE) at a major or area source of HAP emissions is subject to this rule except if the stationary RICE is being tested at a stationary RICE test cell/stand. An area source of HAP emissions is a source that is not a major source. Based on the information submitted by A.M. Welles, the RICE equipment to be used under MAQP #5210-00 may be subject to this subpart if the RICE remains stationary for 12 consecutive months or longer.

D. ARM 17.8, Subchapter 5 – Air Quality Permit Application, Operation, and Open Burning Fees, including, but not limited to:

1. ARM 17.8.504 Air Quality Permit Application Fees. This rule requires that an applicant submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit application is incomplete until the proper application fee is paid to the Department. A.M. Welles submitted the appropriate permit application fee for the current permit action.
2. ARM 17.8.505 Air Quality Operation Fees. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit, excluding an open burning permit, issued by the Department.

An air quality operation fee is separate and distinct from an air quality permit application fee. The annual assessment and collection of the air quality operation fee, described above, shall take place on a calendar-year basis. The Department may insert into any final permit issued after the effective date of these rules, such conditions as may be necessary to require the payment of an air quality operation fee on a calendar-year basis, including provisions that pro-rate the required fee amount.

E. ARM 17.8, Subchapter 7 – Permit, Construction, and Operation of Air Contaminant Sources, including, but not limited to:

1. ARM 17.8.740 Definitions. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
2. ARM 17.8.743 Montana Air Quality Permits--When Required. This rule requires a person to obtain an air quality permit or permit modification to construct, modify, or use any asphalt plant, crusher or screen that has the potential to emit (PTE) greater than 15 tons per year of any pollutant. A.M. Welles has a PTE greater than 15 tons per year of particulate matter with an aerodynamic diameter of 10 microns or less (PM<sub>10</sub>), oxides of nitrogen (NO<sub>x</sub>), and carbon monoxide (CO); therefore, an air quality permit is required.
3. ARM 17.8.744 Montana Air Quality Permits--General Exclusions. This rule identifies the activities that are not subject to the Montana Air Quality Permit program.

4. ARM 17.8.745 Montana Air Quality Permits--Exclusion for De Minimis Changes. This rule identifies the de minimis changes at permitted facilities that do not require a permit under the Montana Air Quality Permit Program.
5. ARM 17.8.748 New or Modified Emitting Units--Permit Application Requirements. (1) This rule requires that a permit application be submitted prior to installation, modification, or use of a source. A.M. Welles submitted the required permit application for the current permit action. (7) This rule requires that the applicant notify the public by means of legal publication in a newspaper of general circulation in the area affected by the application for a permit. A.M. Welles submitted an affidavit of publication of public notice for the August 4, 2018 issue of the Bozeman Daily Chronicle, a newspaper of general circulation in the Town of Belgrade in Gallatin County, as proof of compliance with the public notice requirements.
6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.
7. ARM 17.8.752 Emission Control Requirements. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. The required BACT analysis is included in Section III of this permit analysis.
8. ARM 17.8.755 Inspection of Permit. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.
9. ARM 17.8.756 Compliance with Other Requirements. This rule states that nothing in the permit shall be construed as relieving A.M. Welles of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.*
10. ARM 17.8.759 Review of Permit Applications. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an environmental impact statement.
11. ARM 17.8.760 Additional Review of Permit Applications. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those applications that require an environmental impact statement.
12. ARM 17.8.762 Duration of Permit. An air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or modified source may contain a condition

providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.

13. ARM 17.8.763 Revocation of Permit. An air quality permit may be revoked upon written request of the permittee, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).
  14. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.
  15. ARM 17.8.765 Transfer of Permit. (1) This rule states that an MAQP may be transferred from one location to another if the Department receives a complete notice of intent to transfer location, the facility will operate in the new location for less than 1 year, the facility will comply with the FCAA and the Clean Air Act of Montana, and the facility complies with other applicable rules. (2) This rule states that an air quality permit may be transferred from one person to another if written notice of intent to transfer, including the names of the transferor and the transferee, is sent to the Department.
  16. ARM 17.8.770 Additional Requirements for Incinerators. This rule specifies the additional information that must be submitted to the Department for incineration facilities subject to 75-2-215, Montana Code Annotated (MCA).
- F. ARM 17.8, Subchapter 8 - Prevention of Significant Deterioration of Air Quality, including, but not limited to:
1. ARM 17.8.801 Definitions. This rule is a list of applicable definitions used in this subchapter.
  2. ARM 17.8.818 Review of Major Stationary Sources and Major Modifications--  
Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification with respect to each pollutant subject to regulation under the FCAA that it would emit, except as this subchapter would otherwise allow.

This facility is not a major stationary source because it is not a listed source and the facility's PTE is less than 250 tons per year of any pollutant (excluding fugitive emissions).

G. ARM 17.8, Subchapter 12 – Operating Permit Program Applicability, including, but not limited to:

1. ARM 17.8.1201 Definitions. (23) Major Source under Section 7412 of the FCAA is defined as any stationary source having:
  - a. PTE > 100 tons/year of any pollutant;
  - b. PTE > 10 tons/year of any one hazardous air pollutant (HAP), PTE > 25 tons/year of a combination of all HAPs, or lesser quantity as the Department may establish by rule; or
  - c. PTE > 70 tons/year of particulate matter with an aerodynamic diameter of 10 microns or less (PM<sub>10</sub>) in a serious PM<sub>10</sub> nonattainment area.
2. ARM 17.8.1204 Air Quality Operating Permit Program Applicability. (1) Title V of the FCAA Amendments of 1990 requires that all sources, as defined in ARM 17.8.1204 (1), obtain a Title V Operating Permit. In reviewing and issuing MAQP #5210-00 for A.M. Welles, the following conclusions were made:
  - a. The facility's PTE is less than 100 tons/year for any pollutant.
  - b. The facility's PTE is less than 10 tons/year for any one HAP and less than 25 tons/year of all HAPs.
  - c. This source is not located in a serious PM<sub>10</sub> nonattainment area.
  - d. This facility is subject to a current NSPS (40 CFR 60, Subpart A, Subpart OOO, and possibly Subpart IIII).
  - e. This facility is potentially subject to NESHAP standards (40 CFR 63, Subpart A and Subpart ZZZZ).
  - f. This source is not a Title IV affected source
  - g. This source is not a solid waste combustion unit.
  - h. This source is not an EPA designated Title V source.

A.M. Welles requested federally-enforceable permit limitations to remain a minor source of emissions with respect to Title V. Based on these limitations, the Department determined that this facility is not subject to the Title V Operating Permit Program. However, in the event that the EPA makes minor sources that are subject to NSPS obtain a Title V Operating Permit, this source will be subject to the Title V Operating Permit Program.

- i. ARM 17.8.1204(3). The Department may exempt a source from the requirement to obtain an air quality operating permit by establishing federally enforceable limitations which limit that source's PTE.

- i. In applying for an exemption under this section the owner or operator of the facility shall certify to the Department that the source's PTE does not require the source to obtain an air quality operating permit.
  - ii. Any source that obtains a federally enforceable limit on PTE shall annually certify that its actual emissions are less than those that would require the source to obtain an air quality operating permit.
3. ARM 17.8.1207 Certification of Truth, Accuracy, and Completeness. The compliance certification submittal required by ARM 17.8.1204(3)(a) shall contain certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required under this subchapter shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

### III. BACT Determination

A BACT determination is required for each new or modified source. A.M. Welles shall install on the new or modified source the maximum air pollution control capability which is technologically practicable and economically feasible, except that BACT shall be utilized.

#### A. Process and Fugitive Particulate Emissions

Two types of emission controls are readily available and used for dust suppression of fugitive emissions at the site. These two control methods are water and/or chemical dust suppressant. Chemical dust suppressant could be used on the area surrounding the crushing/screening operation, and for emissions from the crushing/screening operation itself. However, because water is more readily available, is more cost effective, is often equally effective as chemical dust suppressant, and is more environmentally friendly, water has been identified as the most appropriate method of pollution control of particulate emissions.

In addition, water suppression has been required of recently permitted similar sources. However, depending on individual site circumstances A.M. Welles may use chemical dust suppressants to assist in controlling particulate emissions.

The control options selected contain control equipment and control costs comparable to other recently permitted similar sources and are capable of achieving the appropriate emission standards.

The Department determined that using water spray bars, water, and/or chemical dust suppressant to maintain compliance with the opacity requirements and reasonable precaution limitations constitutes BACT.

#### B. Diesel Engines

Due to the limited amount of emissions produced by the diesel-fired engine and the lack of readily available cost effective post-manufacturer add-on controls, add-on controls would be cost prohibitive.

Generally, any new diesel-fired engine would likely be required to comply with the federal engine emission limitations including, for example, EPA Tier engine exhaust emission standards for non-road engines (40 CFR Part 1039) or National Emissions Standards for Hazardous Air Pollutant Sources for Reciprocating Internal Combustion Engines (40 CFR 63, Subpart ZZZZ). Therefore, the Department has determined that compliance with applicable federal standards and proper operation and maintenance of the engine constitutes BACT for the engine.

#### IV. Emission Inventory

<b>CONTROLLED</b> <b>Emission Source</b>	<b>tons/year</b>						
	<b>PM</b>	<b>PM<sub>10</sub></b>	<b>PM<sub>2.5</sub></b>	<b>NO<sub>x</sub></b>	<b>CO</b>	<b>VOC</b>	<b>SO<sub>2</sub></b>
Cold Aggregate Storage Piles	7.94	3.75	0.57	--	--	--	--
Cold Aggregate Handling/Conveyors	0.32	0.10	0.03	--	--	--	--
Cold Aggregate Screens	4.13	1.39	0.09	--	--	--	--
800 TPH Crushing Circuit	1.20	0.54	0.10	--	--	--	--
Plant Load-Out	0.79	0.40	0.06	--	--	--	--
Haul Roads / Vehicle Traffic	3.24	0.89	0.09	--	--	--	--
Diesel Generator (Large)	6.88	6.88	6.88	75.00	17.19	7.86	6.41
<b>Total Emissions</b>	<b>24.48</b>	<b>13.95</b>	<b>7.82</b>	<b>75.00</b>	<b>17.19</b>	<b>7.86</b>	<b>6.41</b>

#### Calculations:

##### Cold Aggregate Storage Piles

Maximum Process Rate = 800 ton/hr (Maximum plant process rate) 800 **ton/hr**  
Maximum Hours of Operation = 2,500 hrs/yr 2500 **hrs/yr**  
Number of Piles = 1 piles 1 **piles**

##### PM Emissions:

Predictive equation for emission factor provided per AP 42, Sec. 13.2.4.3, 11/06.

Emission Factor =  $k (0.0032) * (U/5)^{1.3} * (M / 2)^{-1.4} = 0.00794$  lb/ton 0.0079 **lb/ton**

Where: k = particle size multiplier = 0.74 (Value for PM < 30 microns per AP 42, Sec. 13.2.4.3, 11/06) 0.74

U = mean wind speed = 9.3 mph (Average from values provided in AP 42, Sec. 13.2.4.3, 11/06) 9.3 **mph**

M = material moisture content = 1.5% (Average from values provided in AP 42, Sec. 13.2.4.3, 11/06) 1.5 **%**

Calculation:  $(800 \text{ ton/hr}) * (2500 \text{ hrs/yr}) * (1 \text{ piles}) * (\text{ton}/2000 \text{ lb}) * (0.00793711653497031 \text{ lb/ton}) = 7.94 \text{ ton/yr}$  7.94 **ton/yr**

##### PM10 Emissions:

Predictive equation for emission factor provided per AP 42, Sec. 13.2.4.3, 11/06.

Emission Factor =  $k (0.0032) * (U/5)^{1.3} * (M / 2)^{-1.4} = 0.00375$  lb/ton 0.00375 **lb/ton**

Where: k = particle size multiplier = 0.35 (Value for PM < 10 microns per AP 42, Sec. 13.2.4.3, 11/06) 0.35

U = mean wind speed = 9.3 mph (Average from values provided in AP 42, Sec. 13.2.4.3, 11/06) 9.3 **mph**

M = material moisture content = 1.5% (Average from values provided in AP 42, Sec. 13.2.4.3, 11/06) 1.5 **%**

Calculation:  $(800 \text{ ton/hr}) * (2500 \text{ hrs/yr}) * (1 \text{ piles}) * (\text{ton}/2000 \text{ lb}) * (0.00375404160437785 \text{ lb/ton}) = 3.75 \text{ ton/yr}$  3.75 **ton/yr**

##### PM2.5 Emissions:

Predictive equation for emission factor provided per AP 42, Sec. 13.2.4.3, 11/06.

Emission Factor =  $k (0.0032) * (U/5)^{1.3} * (M / 2)^{-1.4} = 0.00057$  lb/ton 0.000568 **lb/ton**

Where: k = particle size multiplier = 0.053 (Value for PM < 2.5 microns per AP 42, Sec. 13.2.4.3, 11/06) 0.053

U = mean wind speed = 9.3 mph (Average from values provided in AP 42, Sec. 13.2.4.3, 11/06) 9.3 **mph**

M = material moisture content = 1.5% (Average from values provided in AP 42, Sec. 13.2.4.3, 11/06) 1.5 **%**



Calculation:  $(800 \text{ ton/hr}) * (2500 \text{ hrs/yr}) * (1 \text{ piles}) * (\text{ton}/2000 \text{ lb}) * (0.00056846915723436 \text{ lb/ton}) = 0.57 \text{ ton/yr}$  0.57 ton/yr

#### Conveyor Transfer Point (SCC 3-05-020-06)

Maximum Process Rate = 800 ton/hr (Maximum plant process rate) 800 ton/hr  
 Maximum Hours of Operation = 2,500 hrs/yr 2500 hrs/yr  
 Number of Transfers = 9 transfer (Company Information) 9 transfer

##### Total PM Emissions:

Emission Factor = 0.00014 lb/ton (0.00014 controlled, AP 42, Table 11.19.2-2, 8/04) 0.00014 lb/ton  
 Calculation:  $(800 \text{ ton/hr}) * (2500 \text{ hrs/yr}) * (9 \text{ transfer}) * (\text{ton}/2000 \text{ lb}) * (0.00014 \text{ lb/ton}) = 1.26 \text{ ton/yr}$  1.26 ton/yr

##### Total PM10 Emissions:

Emission Factor = 0.000046 lb/ton (0.000046 controlled, AP 42, Table 11.19.2-2, 8/04) 0.000046 lb/ton  
 Calculation:  $(800 \text{ ton/hr}) * (2500 \text{ hrs/yr}) * (9 \text{ transfer}) * (\text{ton}/2000 \text{ lb}) * (0.00014 \text{ lb/ton}) = 0.41 \text{ ton/yr}$  0.41 ton/yr

##### Total PM2.5 Emissions

Emission Factor = 0.000013 lb/ton (0.000013 controlled, AP 42, Table 11.19.2-2, 8/04) 0.000013 lb/ton  
 Calculation:  $(800 \text{ ton/hr}) * (2500 \text{ hrs/yr}) * (9 \text{ transfer}) * (\text{ton}/2000 \text{ lb}) * (0.00014 \text{ lb/ton}) = 0.12 \text{ ton/yr}$  0.12 ton/yr

#### Screening (SCC 3-05-020-02, 03)

Maximum Process Rate = 300 ton/hr (Maximum plant process rate) 300 ton/hr  
 Maximum Hours of Operation = 2,500 hrs/yr 2500 hrs/yr  
 Number of Screens = 5 screen(s) (Company Information) 5 )

##### Total PM Emissions:

Emission Factor = 0.0022 lb/ton (0.0022 controlled, AP 42, Table 11.19.2-2, 8/04) 0.0022 lb/ton  
 Calculation:  $(300 \text{ ton/hr}) * (2500 \text{ hrs/yr}) * (5 \text{ screen(s)}) * (\text{ton}/2000 \text{ lb}) * (0.0022 \text{ lb/ton}) = 4.13 \text{ ton/yr}$  4.13 ton/yr

##### Total PM10 Emissions:

Emission Factor = 0.00074 lb/ton (0.00074 controlled, AP 42, Table 11.19.2-2, 8/04) 0.00074 lb/ton  
 Calculation:  $(300 \text{ ton/hr}) * (2500 \text{ hrs/yr}) * (5 \text{ screen(s)}) * (\text{ton}/2000 \text{ lb}) * (0.0022 \text{ lb/ton}) = 1.39 \text{ ton/yr}$  1.39 ton/yr

##### Total PM2.5 Emissions

Emission Factor = 0.00005 lb/ton (0.000050 controlled, AP 42, Table 11.19.2-2, 8/04) 0.00005 lb/ton  
 Calculation:  $(300 \text{ ton/hr}) * (2500 \text{ hrs/yr}) * (5 \text{ screen(s)}) * (\text{ton}/2000 \text{ lb}) * (0.0022 \text{ lb/ton}) = 0.09 \text{ ton/yr}$  0.09 ton/yr

#### Crushing Circuit (SCC 3-05-020-05)

Maximum Process Rate = 800 ton/hr (Application information) 800 ton/hr  
 Maximum Hours of Operation = 2,500 hrs/yr 2500 hrs/yr

##### PM Emissions:

Based on AP-42

Emission Factor = 0.0012 lb/ton (crushing, AP 42, Table 11.19.2-2, 8/04) 0.0012 lb/ton  
 Calculation:  $(800 \text{ ton/hr}) * (2500 \text{ ton/hr}) * (0.0012 \text{ lb/ton}) * (\text{ton}/2000 \text{ lb}) = 1.20 \text{ ton/yr}$  1.20 ton/yr

##### PM10 Emissions:

Based on AP-42

Emission Factor = 0.00054 lb/ton (crushing, AP 42, Table 11.19.2-2, 8/04) 0.00054 lb/ton  
 Calculation:  $(800 \text{ ton/hr}) * (2500 \text{ hrs/yr}) * (0.00054 \text{ lb/ton}) * (\text{ton}/2000 \text{ lb}) = 0.54 \text{ ton/yr}$  0.54 ton/yr

#### PM2.5 Emissions

Emission Factor = 0.0001 lb/ton (crushing, AP 42, Table 11.19.2-2, 8/04)	0.0001	lb/ton
Calculation: (800 ton/hr) * (2500 ton/hr) * (0.0001 lb/ton) * (ton/2000 lb) = 0.10 ton/yr	0.10	ton/yr

#### Truck Unloading (SCC 3-05-020-31)

Maximum Process Rate = 800 ton/hr (Maximum plant process rate)	800	ton/hr
Maximum Hours of Operation = 2,500 hrs/yr	2500	hrs/yr
Number of loads = 25 loads (Estimate)	25	loads

#### Total PM Emissions:

Emission Factor = 0.0000314 lb/ton (PM=PM10 / 51%, AP-42, Appendix B.2, Table B.2.2, Category 3, 9/90)	0.0000314	lb/ton
Calculation: (800 ton/hr) * (2500 hrs/yr) * (0.0000314 lb/ton) * (ton/2000 lb) * (25 loads) = 0.79 ton/yr	0.79	ton/yr

#### Total PM10 Emissions:

Emission Factor = 0.000016 lb/ton (PM10=1.6E-05, AP 42, Table 11.19.2-2, 8/04)	0.000016	lb/ton
Calculation: (800 ton/hr) * (2500 hrs/yr) * (0.000016 lb/ton) * (ton/2000 lb) * (25 loads) = 0.40 ton/yr	0.40	ton/yr

#### Total PM2.5 Emissions:

Emission Factor = 0.0000024 lb/ton (PM2.5=1.6E-05 * 15%, AP-42, Appendix B.2, Table B.2.2, Category 3, 9/90)	0.0000024	lb/ton
Calculation: (800 ton/hr) * (2500 hrs/yr) * (0.0000024 lb/ton) * (ton/2000 lb) * (25 loads) = 0.06 ton/yr	0.06	ton/yr

#### Haul Roads

Vehicle Miles Traveled (VMT) per Day = 5 VMT/day (Estimate)	5	VMT/day
VMT per hour = (5 VMT/day) * (day/24 hrs) = 0.21 VMT/hr	0.2083333	VMT/hr
Hours of Operation = 2,500 hrs/yr	2500	hrs/yr

#### PM Emissions:

Predictive equation for emission factor for unpaved roads at industrial sites provided per AP 42, Ch. 13.2.2, 11/06.

Emission Factor = $k * (s / 12)^a * (W / 3)^b = 12.46$ lb/VMT	12.46	lb/VMT
Where: k = constant = 4.9 lbs/VMT (Value for PM30/TSP, AP 42, Table 13.2.2-2, 11/06)	4.9	lbs/VMT

s = surface silt content = 7.1 % (Mean value, sand/gravel processing, material storage area, AP 42, Table 13.2.2-1, 11/06)	7.1	%
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W = mean vehicle weight = 54 tons (1994 average loaded/unloaded or a 40 ton truck)	54	tons
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a = constant = 0.7 (Value for PM30/TSP, AP 42, Table 13.2.2-2, 11/06)	0.7	
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b = constant = 0.45 (Value for PM30/TSP, AP 42, Table 13.2.2-2, 11/06)	0.45	
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Calculation: (2500 hrs/yr) * (0.21 VMT/hr) * (12.46 lb/VMT) * (ton/2000 lb) = 3.24 tons/yr (Uncontrolled Emissions)	3.24	tons/yr
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#### PM10 Emissions:

Predictive equation for emission factor for unpaved roads at industrial sites provided per AP 42, Ch. 13.2.2, 11/06.

Emission Factor = $k * (s / 12)^a * (W / 3)^b = 3.43$ lb/VMT	3.43	lb/VMT
Where: k = constant = 1.5 lbs/VMT (Value for PM10, AP 42, Table 13.2.2-2, 11/06)	1.5	lbs/VMT

s = surface silt content = 7.1 % (Mean value, sand/gravel processing, material storage area, AP 42, Table 13.2.2-1, 11/06)	7.1	%
--	-----	---

W = mean vehicle weight = 54 tons (1994 average loaded/unloaded or a 40 ton truck)	54	tons
--	----	------

a = constant = 0.9 (Value for PM10, AP 42, Table 13.2.2-2, 11/06)	0.9	
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b = constant = 0.45 (Value for PM10, AP 42, Table 13.2.2-2, 11/06)	0.45	
--	------	--

Calculation: (2500 hrs/yr) * (0.21 VMT/hr) * (3.43 lb/VMT) * (ton/2000 lb) = 0.89 tons/yr (Uncontrolled Emissions)	0.89	tons/yr
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#### PM2.5 Emissions

Predictive equation for emission factor for unpaved roads at industrial sites provided per AP 42, Ch. 13.2.2, 11/06.

Emission Factor = $k * (s / 12)^a * (W / 3)^b = 0.34 \text{ lb/VT}$	0.34	lb/VT
Where: k = constant = 0.15 lbs/VT (Value for PM2.5, AP 42, Table 13.2.2-2, 11/06)	0.15	lbs/VT
s = surface silt content = 7.1 % (Mean value, sand/gravel processing, material storage area, AP 42, Table 13.2.2-1, 11/06)	7.1	%
W = mean vehicle weight = 54 tons (1994 average loaded/unloaded or a 40 ton truck)	54	tons
a = constant = 0.9 (Value for PM2.5, AP 42, Table 13.2.2-2, 11/06)	0.9	
b = constant = 0.45 (Value for PM2.5, AP 42, Table 13.2.2-2, 11/06)	0.45	
Calculation: $(2500 \text{ hrs/yr}) * (0.21 \text{ VMT/hr}) * (0.34 \text{ lb/VT}) * (\text{ton}/2000 \text{ lb}) = 0.09 \text{ tons/yr}$ (Uncontrolled Emissions)	0.09	tons/yr

### Diesel Generator (Large)

Note: Emissions are based on the power output of the engine (2500 hp).

Operational Capacity of Engine = 2,500 hp	2500	hp
Hours of Operation = 2,500.00 hours	2500	hours

PM Emissions:

PM Emissions = 6.88 ton/yr (Assume all PM < 1.0 um)	6.88	ton/yr
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PM-10 Emissions:

Emission Factor = 0.0022 lbs/hp-hr (AP-42, Sec. 3.3, Table 3.3-1, 10/96)	0.0022	lbs/hp-hr
Calculation: $(2,500 \text{ hp}) * (2,500 \text{ hours}) * (0.0022 \text{ lbs/hp-hr}) * (\text{ton}/2000 \text{ lb}) = 6.88 \text{ ton/yr}$	6.88	ton/yr

PM2.5 Emissions

Emission Factor = 0.0022 lbs/hp-hr (Assume all PM < 1.0 um)	0.0022	lbs/hp-hr
Calculation: $(2,500 \text{ hp}) * (2,500 \text{ hours}) * (0.0022 \text{ lbs/hp-hr}) * (\text{ton}/2000 \text{ lb}) = 6.88 \text{ ton/yr}$ (Assume all PM < 1.0 um)	6.88	ton/yr

NOx Emissions:

Emission Factor = 0.024 lbs/hp-hr (AP-42, Sec. 3.3, Table 3.3-1, 10/96)	0.024	lbs/hp-hr
Calculation: $(2,500 \text{ hp}) * (2,500 \text{ hours}) * (0.024 \text{ lbs/hp-hr}) * (\text{ton}/2000 \text{ lb}) = 75.00 \text{ ton/yr}$	75.00	ton/yr

CO Emissions:

Emission Factor = 0.0055 lbs/hp-hr (AP-42, Sec. 3.3, Table 3.3-1, 10/96)	5.50E-03	lbs/hp-hr
Calculation: $(2,500 \text{ hp}) * (2,500 \text{ hours}) * (0.0055 \text{ lbs/hp-hr}) * (\text{ton}/2000 \text{ lb}) = 17.19 \text{ ton/yr}$	17.19	ton/yr

VOC Emissions:

Emission Factor = 0.0025141 lbs/hp-hr (AP-42, Sec. 3.3, Table 3.3-1, TOC, Exhaust & Crankcase, 10/96)	2.51E-03	lbs/hp-hr
Calculation: $(2,500 \text{ hp}) * (2,500 \text{ hours}) * (0.0025141 \text{ lbs/hp-hr}) * (\text{ton}/2000 \text{ lb}) = 7.86 \text{ ton/yr}$	7.86	ton/yr

SOx Emissions:

Emission Factor = 0.00205 lbs/hp-hr (AP-42, Sec. 3.3, Table 3.3-1, 10/96)	2.05E-03	lbs/hp-hr
Calculation: $(2,500 \text{ hp}) * (2,500 \text{ hours}) * (0.00205 \text{ lbs/hp-hr}) * (\text{ton}/2000 \text{ lb}) = 6.41 \text{ ton/yr}$	6.41	ton/yr

V. Existing Air Quality

This permit is for a portable crushing/screening facility, which will initially be located at **Section 15, Township 2 North, Range 4 East**, in Gallatin County, Montana, and in those areas for which this facility is permitted to operate, have been designated unclassified/attainment with all ambient air quality standards, and where there are no major air pollution sources in the surrounding area.

VI. Air Quality Impacts

This permit contains conditions and limitations that would protect air quality for the site and surrounding area. Furthermore, this facility is a portable source that would operate on an intermittent and temporary basis, so any effects to air quality will be minor and of limited duration.

VII. Ambient Air Impact Analysis

Based on the information provided and the conditions established in MAQP #5210-00, the Department determined that the impact from this permitting action will be minor.

VIII. Taking or Damaging Implication Analysis

As required by 2-10-105, MCA, the Department conducted the following private property taking and damaging assessment.

YES	NO	
X		1. Does the action pertain to land or water management or environmental regulation affecting private real property or water rights?
	X	2. Does the action result in either a permanent or indefinite physical occupation of private property?
	X	3. Does the action deny a fundamental attribute of ownership? (ex.: right to exclude others, disposal of property)
	X	4. Does the action deprive the owner of all economically viable uses of the property?
	X	5. Does the action require a property owner to dedicate a portion of property or to grant an easement? [If no, go to (6)].
		5a. Is there a reasonable, specific connection between the government requirement and legitimate state interests?
		5b. Is the government requirement roughly proportional to the impact of the proposed use of the property?
	X	6. Does the action have a severe impact on the value of the property? (consider economic impact, investment-backed expectations, character of government action)
	X	7. Does the action damage the property by causing some physical disturbance with respect to the property in excess of that sustained by the public generally?
	X	7a. Is the impact of government action direct, peculiar, and significant?
	X	7b. Has government action resulted in the property becoming practically inaccessible, waterlogged or flooded?
	X	7c. Has government action lowered property values by more than 30% and necessitated the physical taking of adjacent property or property across a public way from the property in question?
	X	Takings or damaging implications? (Taking or damaging implications exist if YES is checked in response to question 1 and also to any one or more of the following questions: 2, 3, 4, 6, 7a, 7b, 7c; or if NO is checked in response to questions 5a or 5b; the shaded areas)

Based on this analysis, the Department determined there are no taking or damaging implications associated with this permit action.

#### IX. Environmental Assessment

An environmental assessment, required by the Montana Environmental Policy Act, was completed for this project. A copy is attached.

**DEPARTMENT OF ENVIRONMENTAL QUALITY**  
**Air, Energy & Mining Division**  
**Air Quality Bureau**  
**P.O. Box 200901, Helena, MT 59620**  
**(406) 444-3490**

**ENVIRONMENTAL ASSESSMENT (EA)**

*Issued To:* A.M. Welles, Inc.

*Montana Air Quality Permit number (MAQP):* 5210-00

*EA Draft:* August 22, 2018

*EA Final:*

*Permit Final:*

1. *Legal Description of Site:* The initial location is the NW<sup>1</sup>/<sub>4</sub> of Section 17 and the NE<sup>1</sup>/<sub>4</sub> of Section 18, Township 1 South, Range 5 East, in Gallatin County, Montana.
2. *Description of Project:* The current permit action would issue an MAQP to A.M. Welles for the operation of a new crushing/screening facility.
3. *Objectives of Project:* Increased business and revenue for A.M. Welles through the use and sale of aggregate.
4. *Alternatives Considered:* In addition to the proposed action, the Department also considered the “no-action” alternative. The no-action alternative describes the effect of not permitting the source. For the current permitting action, the no action alternative would deny the permit and could possibly result in a loss of revenue for A.M. Welles. Since A.M. Welles has demonstrated compliance with all applicable rules and regulations as required for permit issuance, the “no-action” alternative was eliminated from further consideration.
5. *A Listing of Mitigation, Stipulations, and Other Controls:* A list of enforceable conditions, including a BACT analysis, would be included in MAQP #5210-00
6. *Regulatory Effects on Private Property:* The Department considered alternatives to the conditions imposed in this permit as part of the permit development. The Department determined that the permit conditions are reasonably necessary to ensure compliance with applicable requirements and demonstrate compliance with those requirements and do not unduly restrict private property rights.
7. *SUMMARY OF COMMENTS ON POTENTIAL PHYSICAL AND BIOLOGICAL EFFECTS:* The following comments have been prepared by the Department.

A. Terrestrial and Aquatic Life and Habitats

The permitting action would have minor effects on terrestrial and aquatic life or habitats. The current permit action would allow A.M. Welles to operate the new crushing/screening facility in their “home pit” which is considered an already existing site.

B. Water Quality, Quantity and Distribution

The permitting action would have minor effects on water quality, quantity, or distribution because the current permit action would incorporate new equipment in an already existing site.

C. Geology and Soil Quality, Stability and Moisture

The permitting action would have no effects on geology, soil quality, or stability and moisture, outside of daily crushing/screening activities, because there would be no new construction associated with the permitting action.

D. Vegetation Cover, Quantity, and Quality

The permitting action would have no effects on vegetative cover, quantity, or quality because there would be no new construction associated with the permitting action.

E. Aesthetics

The permitting action would have no effects on aesthetics because there would be no new construction associated with the current permit action.

F. Air Quality

Air quality impacts from the proposed project would likely be minor because the facility would be relatively small and operate on an intermittent and temporary basis. MAQP #5210-00 includes conditions limiting the facility's opacity; requiring that water and water spray bars are available on site and used to ensure compliance with opacity standards; and limiting the facility's crushing and screening production.

G. Unique Endangered, Fragile, or Limited Environmental Resources

The Department contacted the Montana Natural Heritage Program (MNHP) in an effort to identify any species of concern that may be found in the area where the initial proposed crushing facility would occur. Search results have concluded there are three (3) animal species of concern and four (4) plants species of concern in the area. Area, in this case, would be defined by the township and range of the proposed site, with an additional 1-mile buffer. The known animal species of concern are the Great Blue Heron, Hooked Snowfly, and Alberta Snowfly. The plant species of concern are the Dwarf Purple Monkeyflower, Rocky Mountain Twinpod, Slender Wedgegrass, and Small Dropseed. Specific effects of operating the proposed project in this area would be minor since the project is small, temporary, and operates on an intermittent basis. Therefore, the Department determined that any effects upon these species would likely be minor and short-lived.

H. Sage Grouse Executive Order

The Department recognizes that the initial site selection is not within the Greater Sage Grouse habitat as defined by Executive Order No. 12-2015.

I. Demands on Environmental Resource of Water, Air and Energy

Due to the relatively small size of the project, only small demands on environmental resources would likely be required for proper operation. Only small quantities of water are required for dust suppression of particulate emissions being generated at the site. In addition, impacts to air resources would be expected to be minor because the source would be considered a minor industrial source of emissions, with intermittent and seasonal operations, and because air pollutants generated by the facility would be widely dispersed as described in Section 7.F of this EA. Energy requirements would also be small, as the diesel engine would use small amounts of fuel. Overall, any impacts to water, air, and energy resources would likely be minor.

J. Historical and Archaeological Sites

The permitting action would have no effects on historical and archaeological sites because there is no new construction associated with the current permit action. However, if cultural materials are discovered during this project the Montana Historical Society should be contacted.

K. Cumulative and Secondary Impacts

The operation of the larger generator and multiple crushers and screens would likely cause minor cumulative and secondary impacts to the physical and biological aspects of the human environment because the facility would be limited in the amount of emissions allowed to be released to the atmosphere. Emissions and noise generated from the equipment would likely result in only minor impacts to the area, as the facility would be seasonal and temporary. The proposed project would be short-term in nature, and likely have minor cumulative effects upon resources within the area. These resources include water, terrestrial and aquatic life, soils, and vegetation. Overall, cumulative and secondary impacts to the physical and biological aspects of the human environment would likely be minor.

8. *SUMMARY OF COMMENTS ON POTENTIAL ECONOMIC AND SOCIAL EFFECTS:*  
The following comments have been prepared by the Department.

A. Social Structures and Mores

The permitting action would have no effects on social structure or mores because the current permitting action does not have any new construction and is located on an already existing site.

B. Cultural Uniqueness and Diversity

The permitting action would have no effects on cultural uniqueness and diversity because the current permitting action located on an already existing site.

C. Local and State Tax Base and Tax Revenue

The operation of the facility would likely have little, if any, impact on the local and state tax base and tax revenue because the facility would be a minor industrial source of emissions and would have seasonal and intermittent operations.



D. Agricultural or Industrial Production

The permitting action would have no effects on agricultural or industrial production because there is no new construction associated with the current permitting action.

E. Human Health

MAQP #5210-00 would incorporate conditions to ensure that the facility would operate in compliance with all applicable air quality rules and standards.

F. Access to and Quality of Recreational and Wilderness Activities

The permitting action would have no effects on the access to and quality of recreational and wilderness activities because the current permitting action is located on an already existing site.

G. Quantity and Distribution of Employment

The permitting action would have no effects on the quantity and distribution of employment because the operation of the crushing and screening plant would not require additional employees or require current employees to relocate.

H. Distribution of Population

The permitting action would have no effects on the distribution of population because there would be no need to hire any new employees.

I. Demands for Government Services

Government services would be required for acquiring the appropriate permits for the proposed project and to verify compliance with the permits that would be issued. However, demands for government services would be expected to be minor.

J. Industrial and Commercial Activity

The operation of the new equipment would represent only a minor increase in the industrial activity in the proposed area of operation because the source would be a relatively small industrial source that would be portable and temporary in nature.

K. Locally Adopted Environmental Plans and Goals

The Department is not aware of any locally adopted environmental plans and goals this project may impact. The State standards would be protective of the proposed project area.

L. Cumulative and Secondary Impacts

Overall, cumulative and secondary impacts from this project would result in minor impacts to the economic and social environment in the immediate area due to the relatively small size of the operation. The Department believes that this facility could be expected to operate in compliance with all applicable rules and regulations as would be outlined in MAQP #5210-00.

Recommendation: No Environmental Impact Statement (EIS) is required.

If an EIS is not required, explain why the EA is an appropriate level of analysis: The current permitting action is for the construction and operation of portable crushing and screening facility. MAQP #5210-00 includes conditions and limitations to ensure the facility would operate in compliance with all applicable rules and regulations. In addition, there are no significant impacts associated with this proposal.

Other groups or agencies contacted or which may have overlapping jurisdiction: Montana Historical Society – State Historic Preservation Office, Natural Resource Information System – Montana Natural Heritage Program – Montana Sage Grouse Conservation Program

Individuals or groups contributing to this EA: Department of Environmental Quality – Air Quality Bureau, Montana Historical Society – State Historic Preservation Office, Natural Resource Information System – Montana Natural Heritage Program

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